

Figure 1

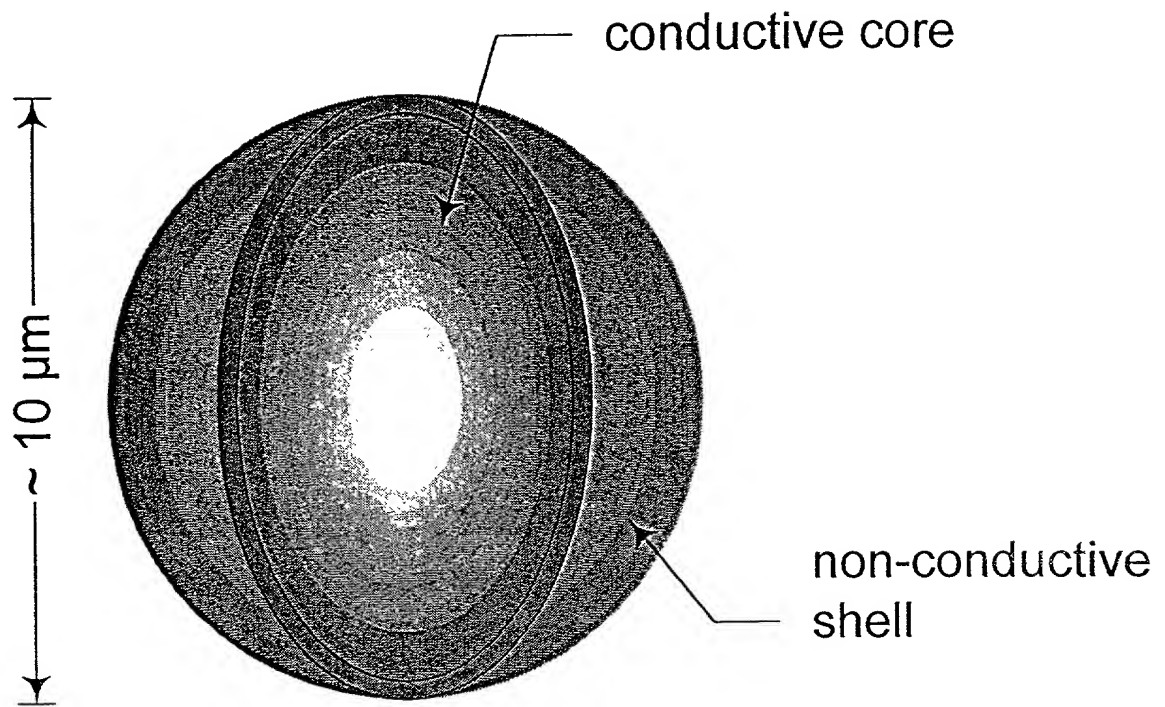


Figure 2

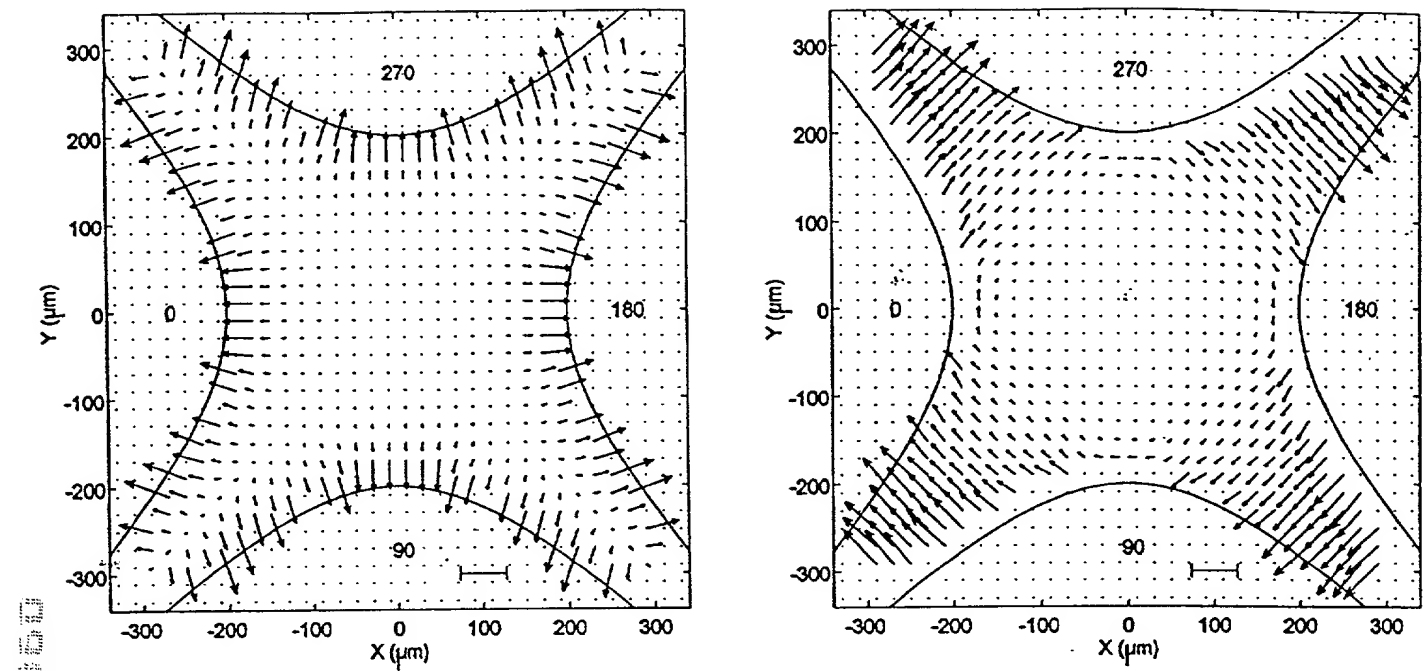


Figure 3

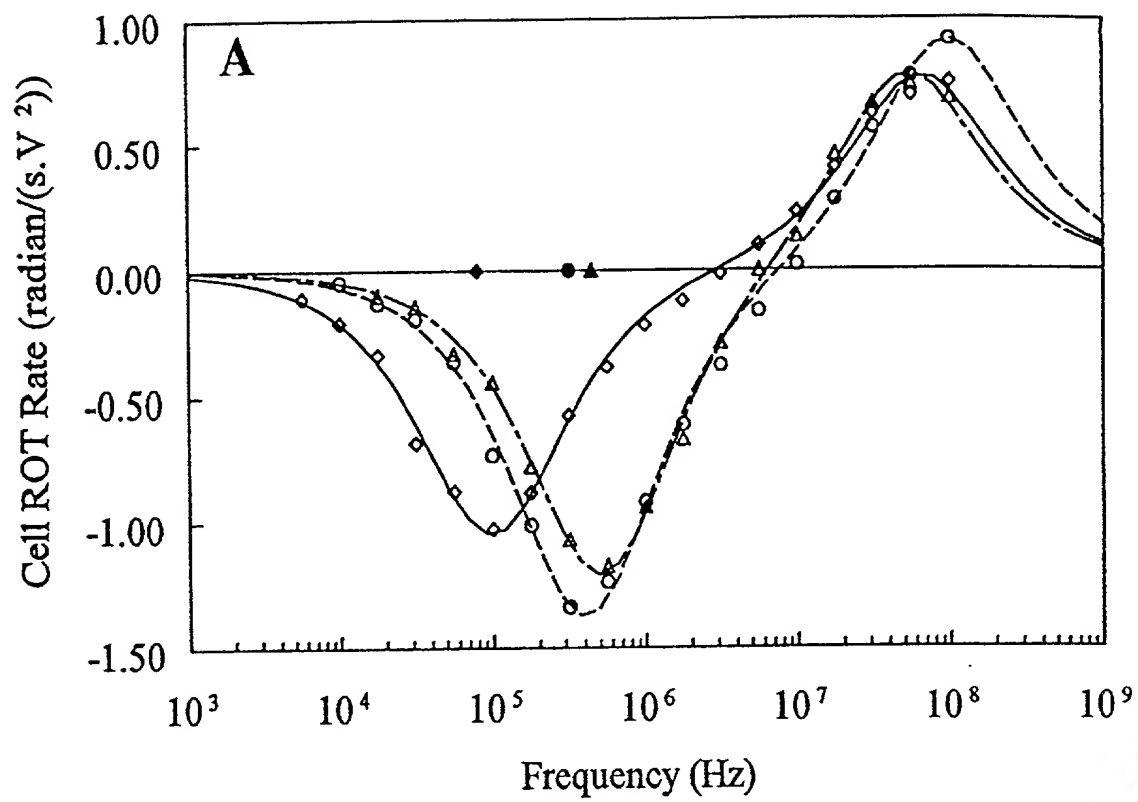


Figure 4

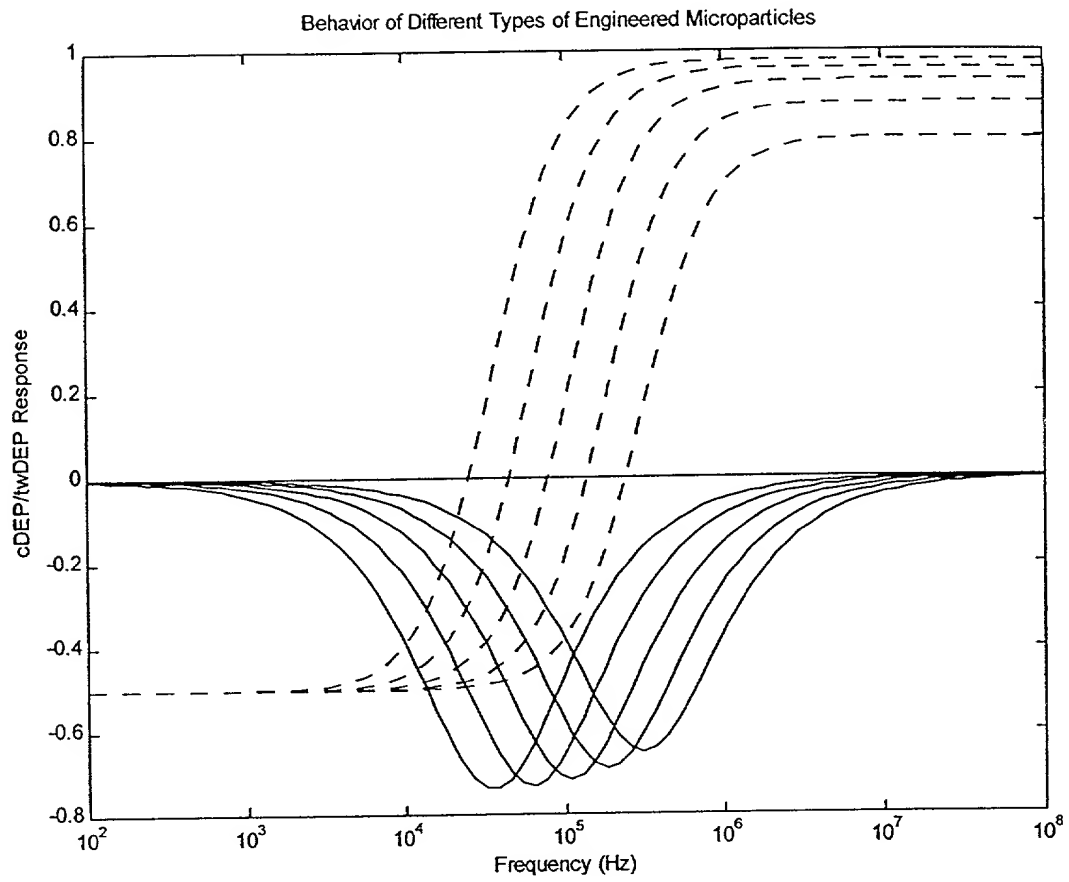


Figure 5

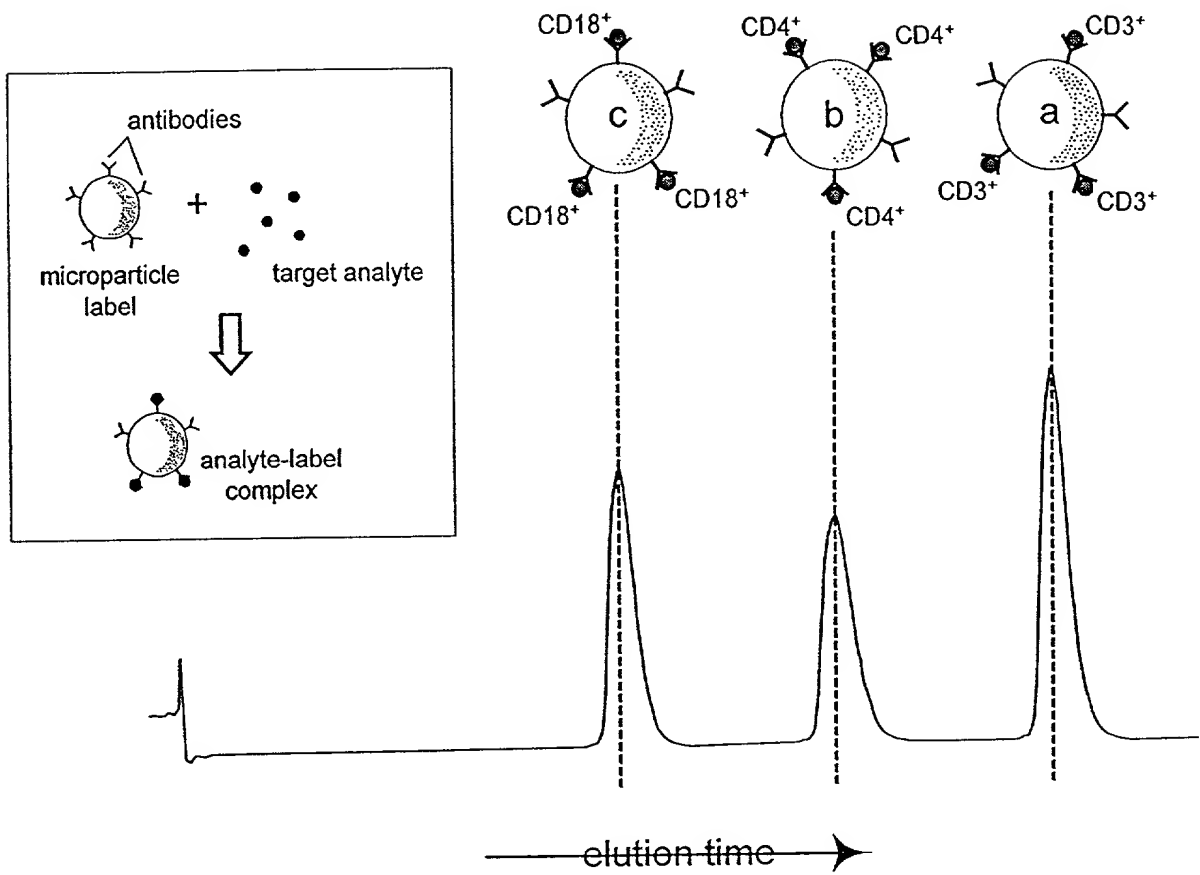


Figure 6

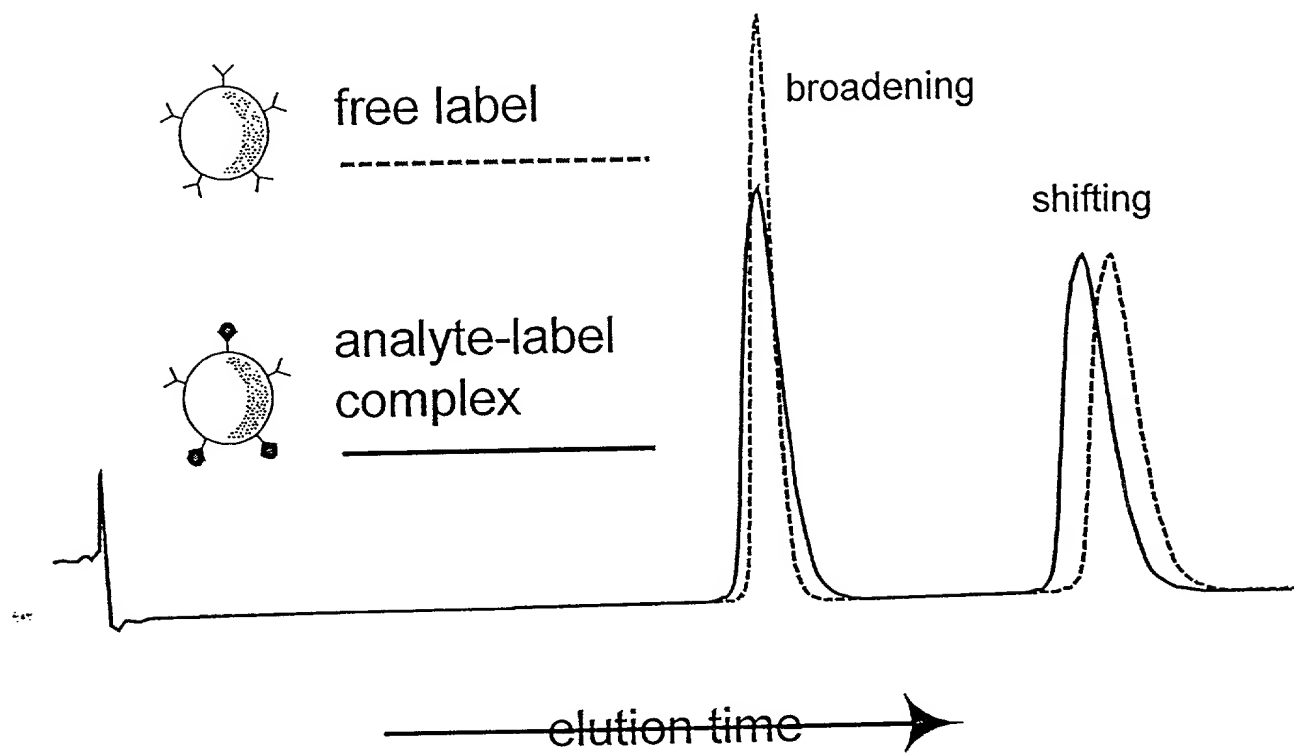


Figure 7

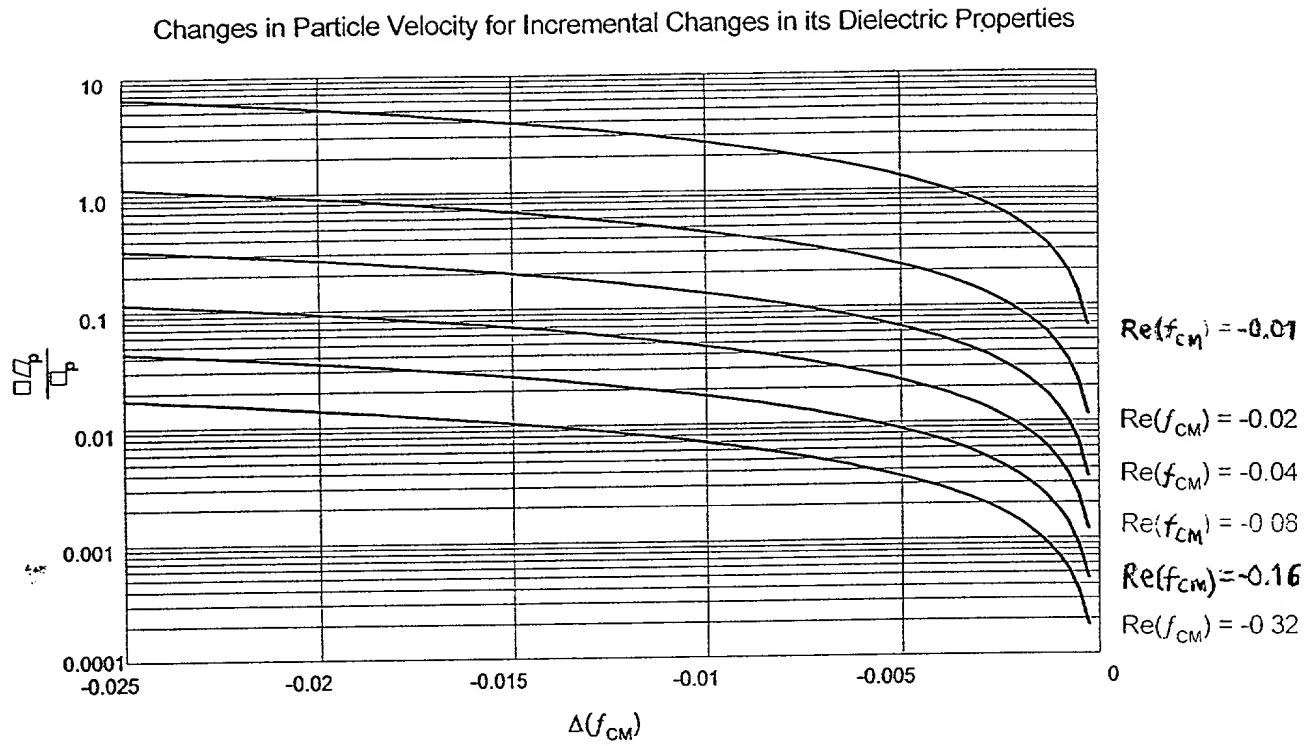
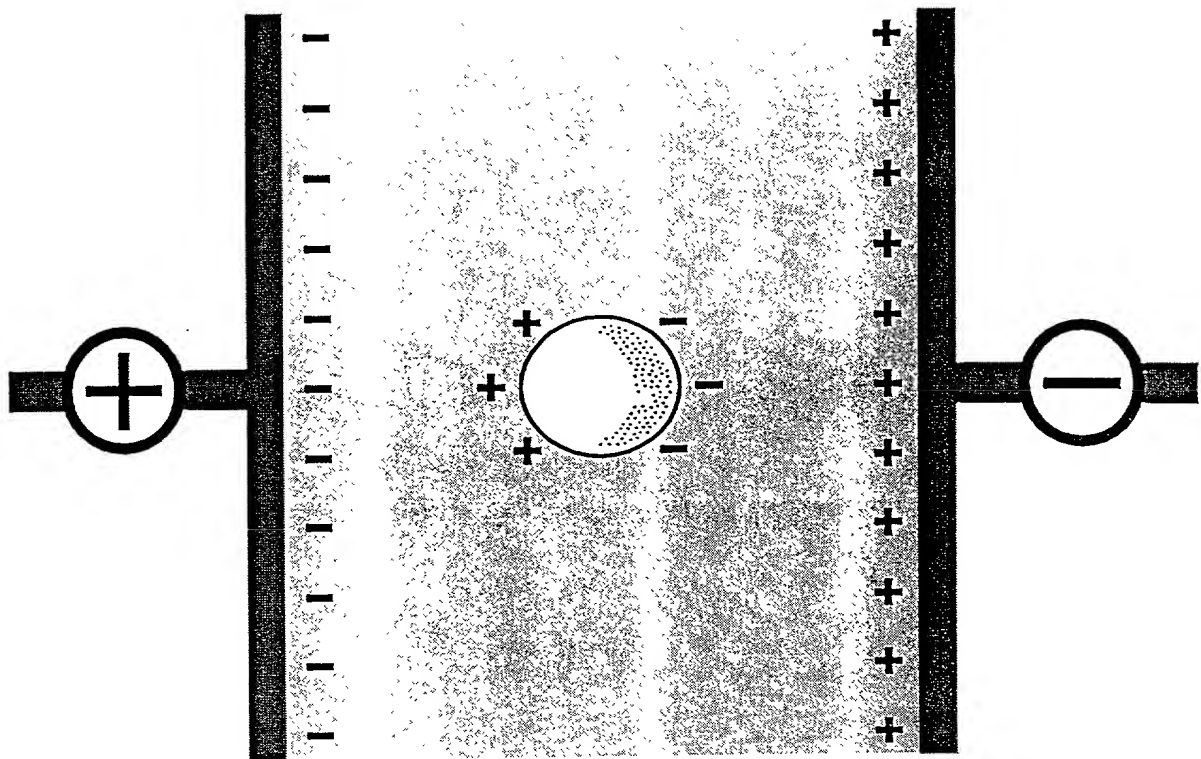


Figure 8



$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 78 \times \epsilon_0$$

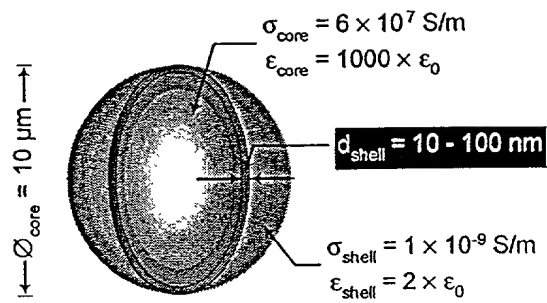


FIG. 9A

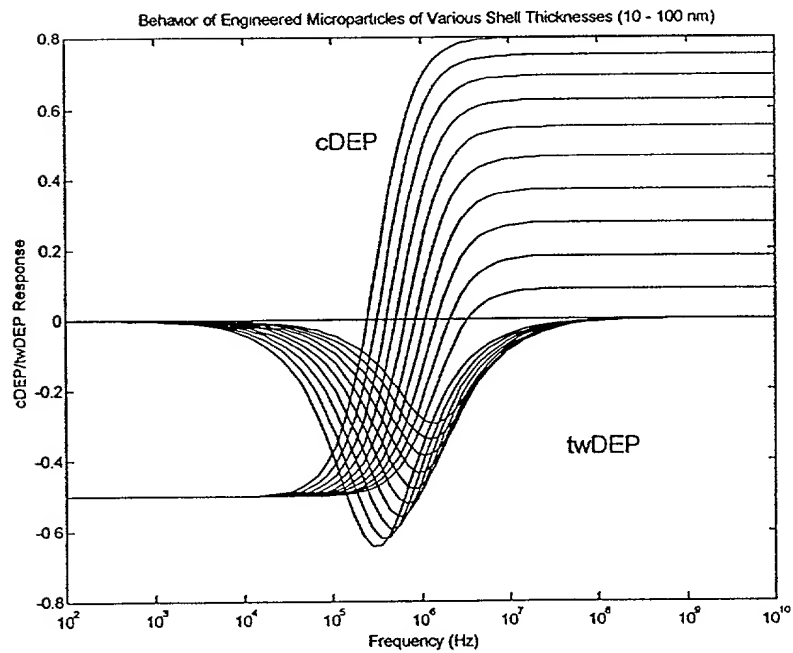


FIG. 9B

$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 78 \times \epsilon_0$$

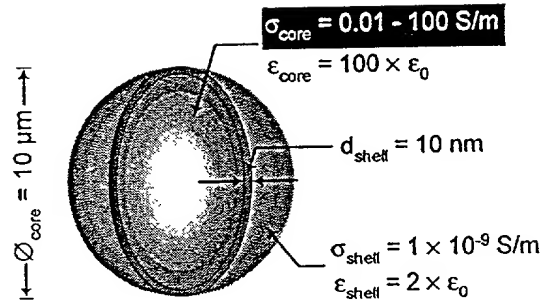


FIG. 10A

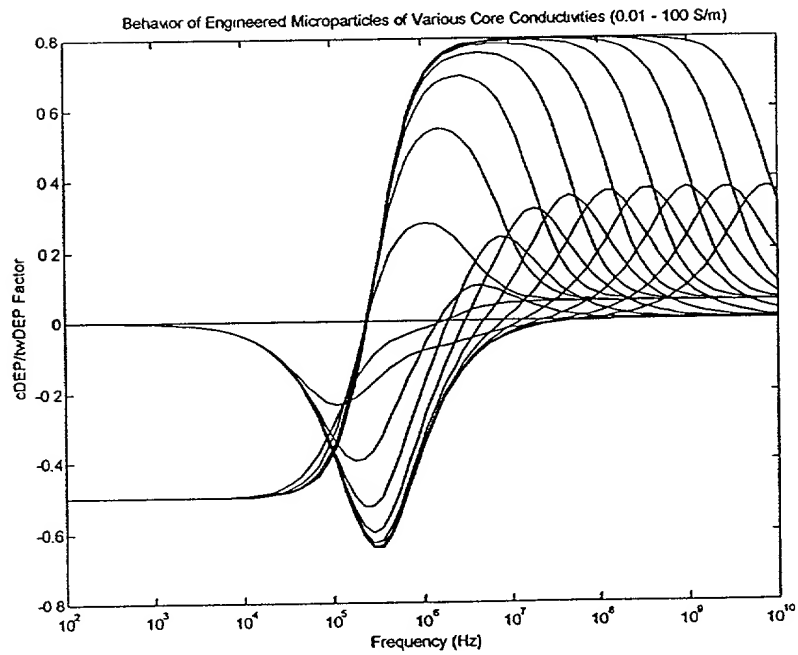


FIG. 10B

$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 78 \times \epsilon_0$$

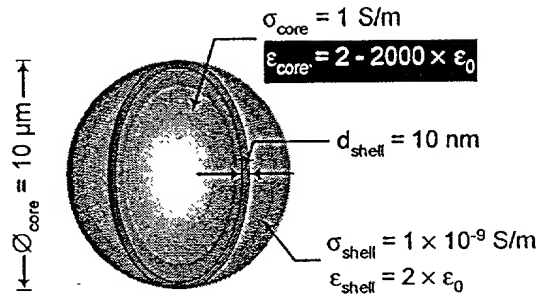


FIG. 11A

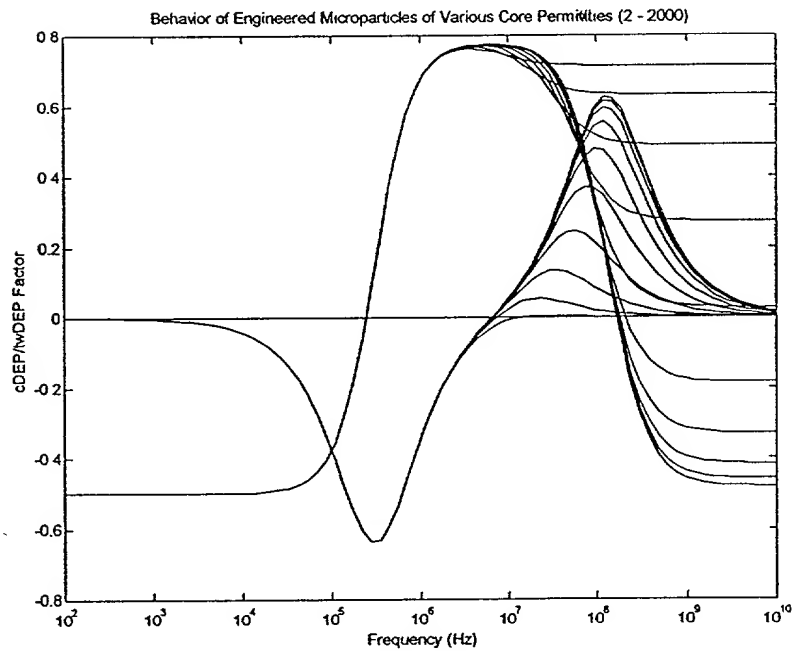


FIG. 11B

$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 78 \times \epsilon_0$$

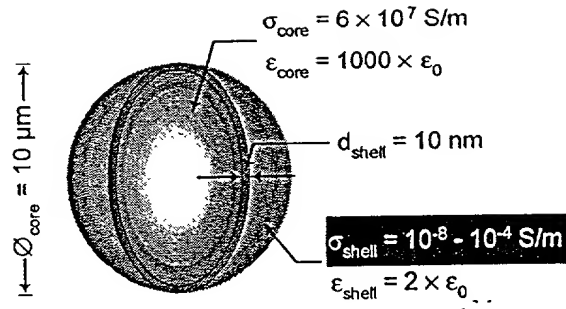


FIG. 12A

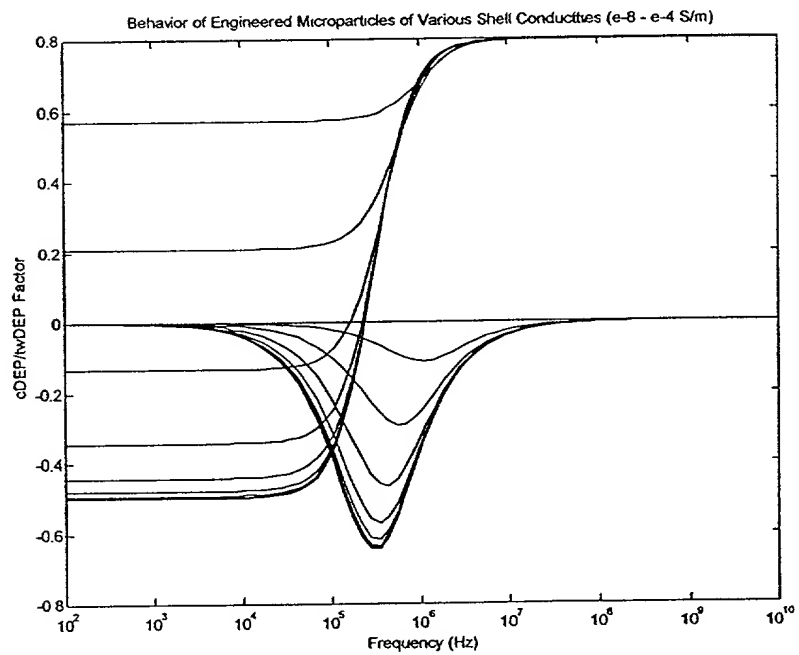


FIG. 12B

$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 78 \times \epsilon_0$$

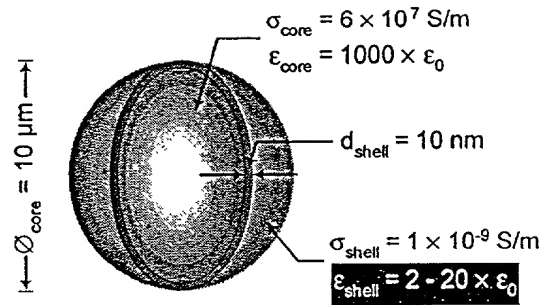


FIG. 13A

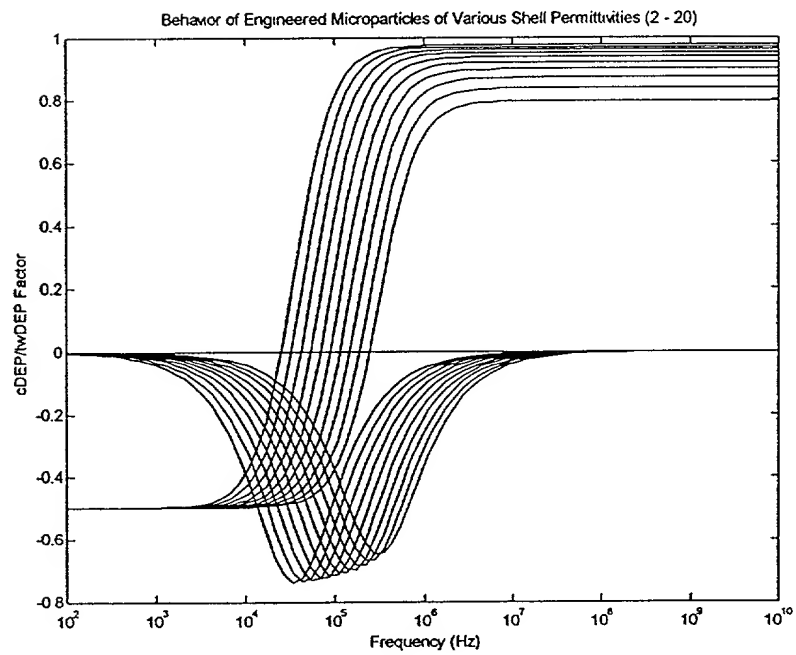
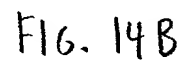
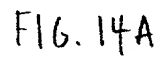


FIG. 13B

[illegible]

$$\sigma_{\text{medium}} = 0.01 \text{ S/m}$$

$$\epsilon_{\text{medium}} = 2 - 200 \times \epsilon_0$$

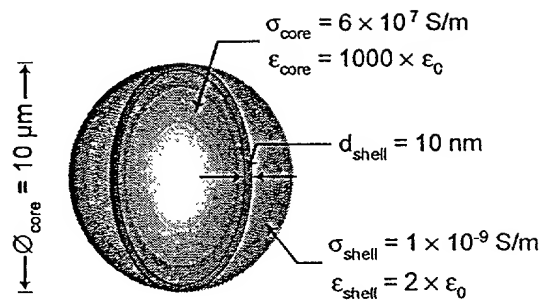


FIG. 15A

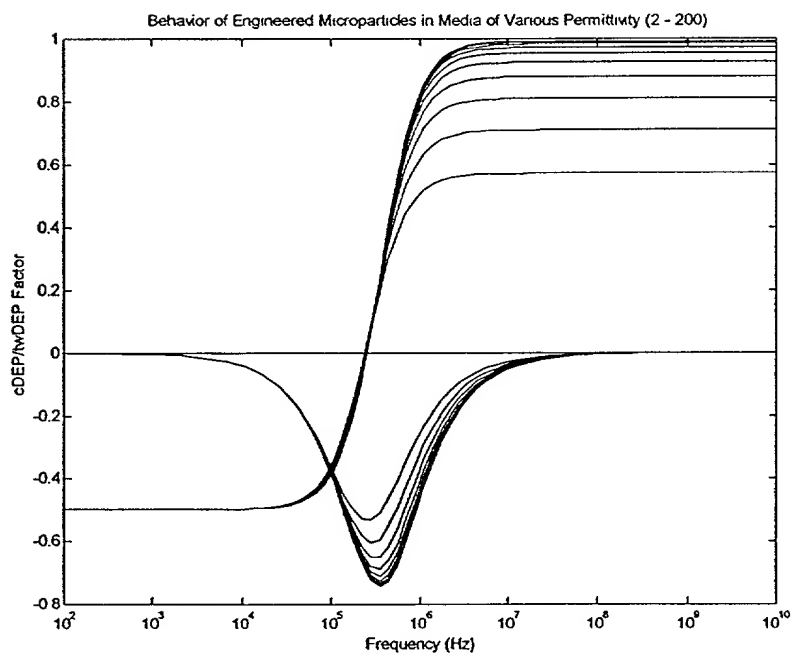
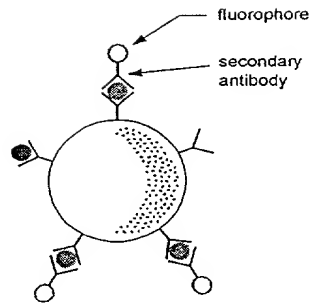
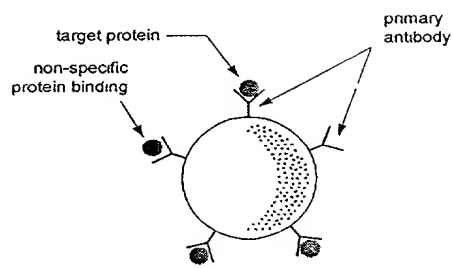


FIG. 15B

1. Protein Detection



2. mRNA Detection

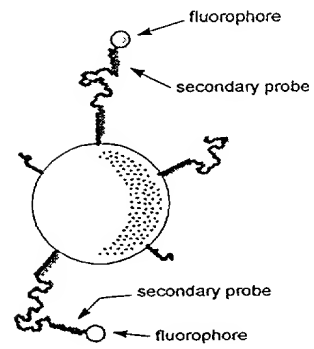
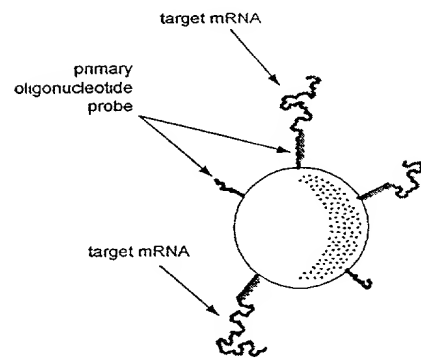


FIG. 16

single layer version

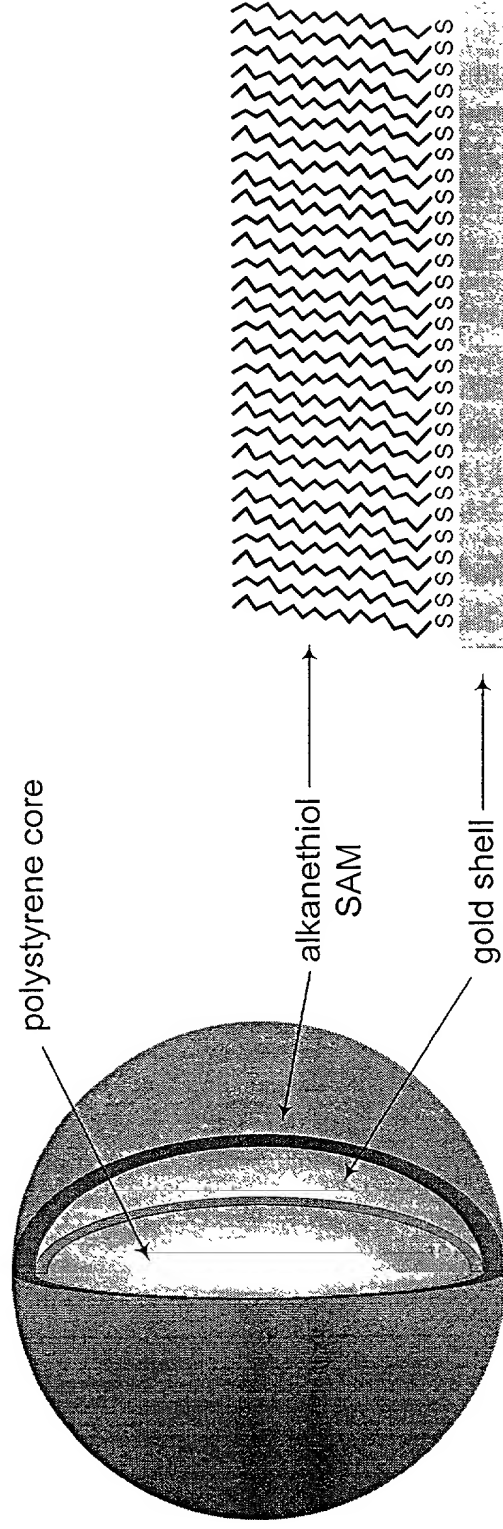


FIG. 17

double layer version

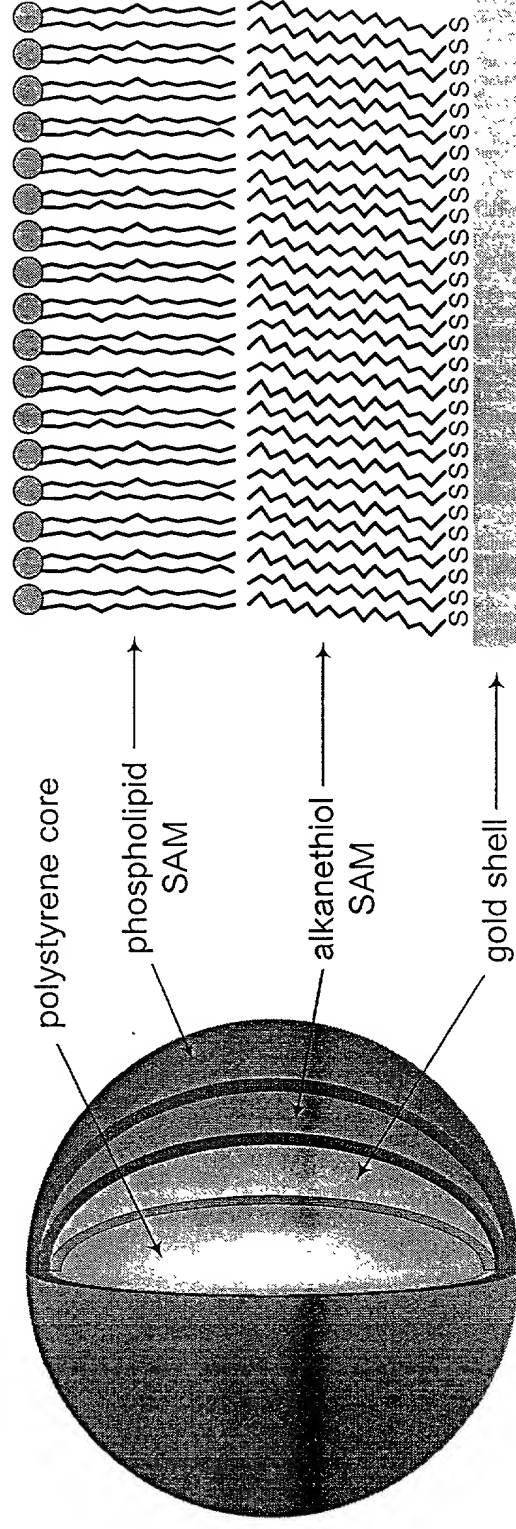


Fig. 18

cross-linked double layer version

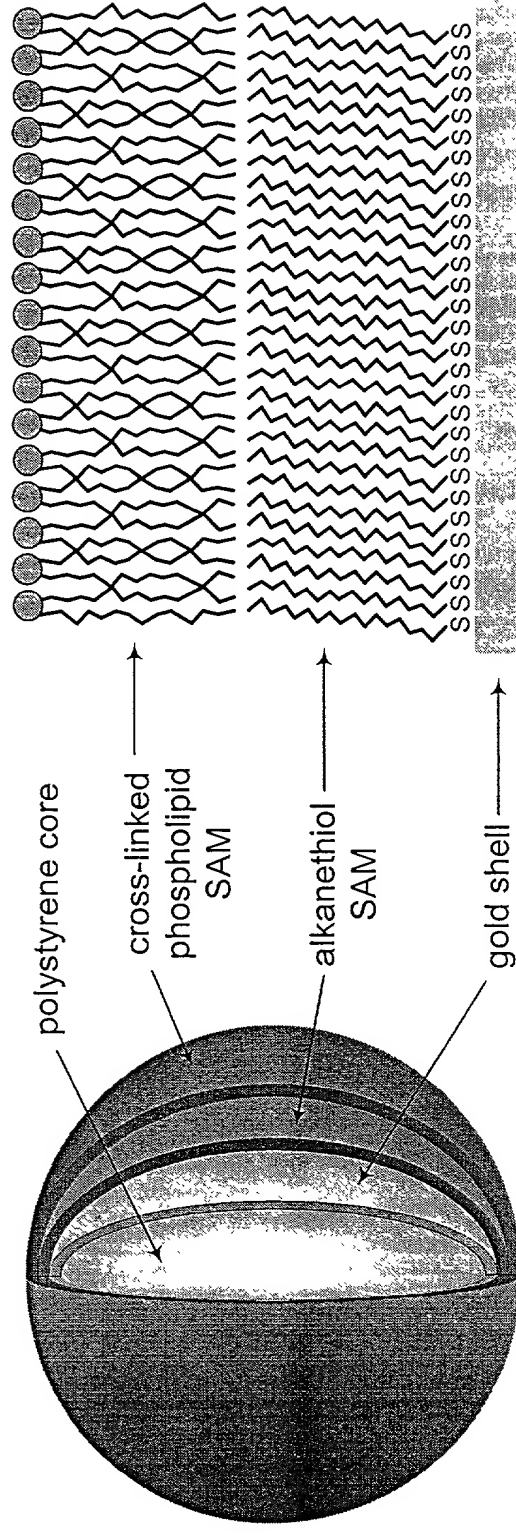


Fig. 19

double layer version with nucleic acid recognition element

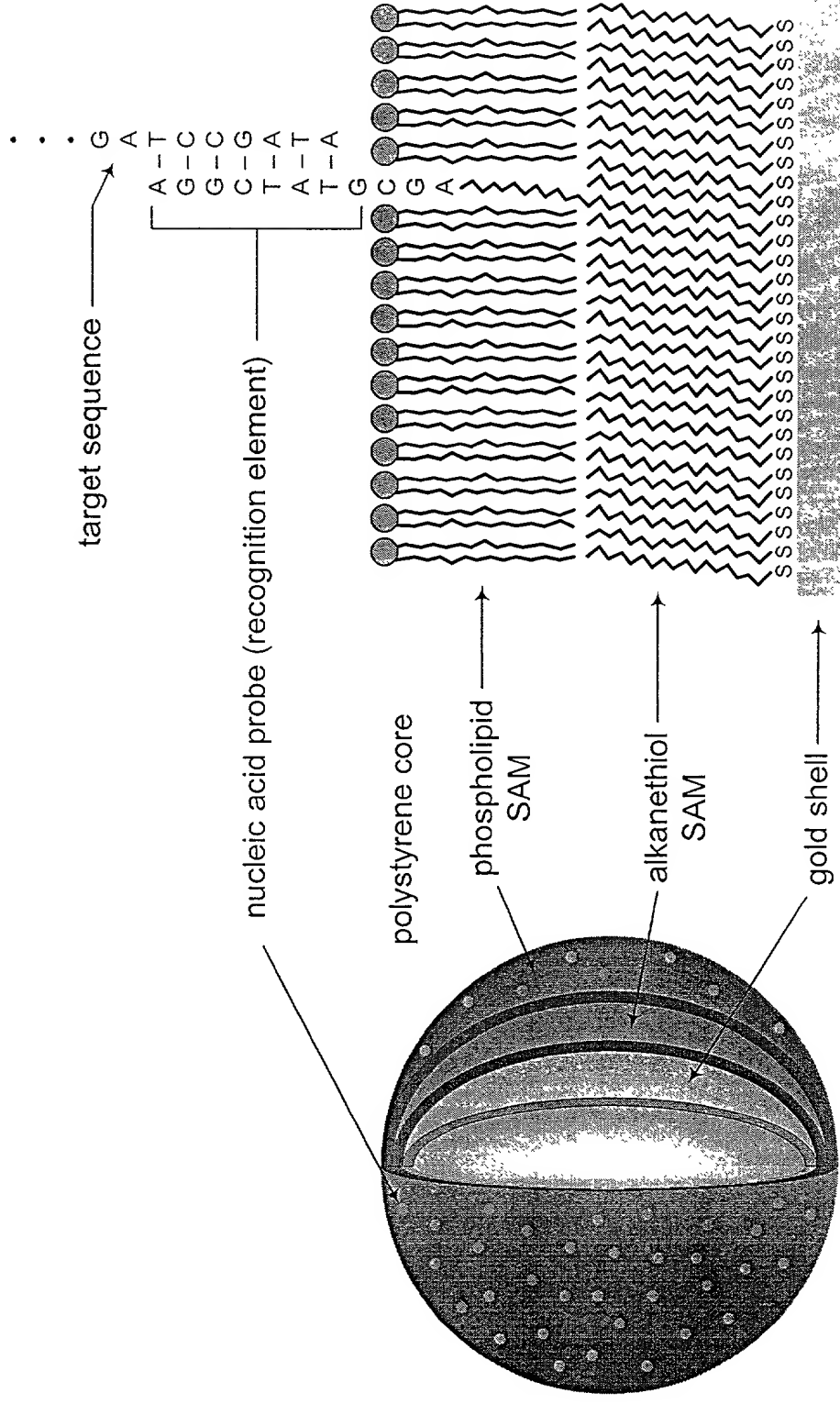


FIG. 20

double layer version with protein recognition element

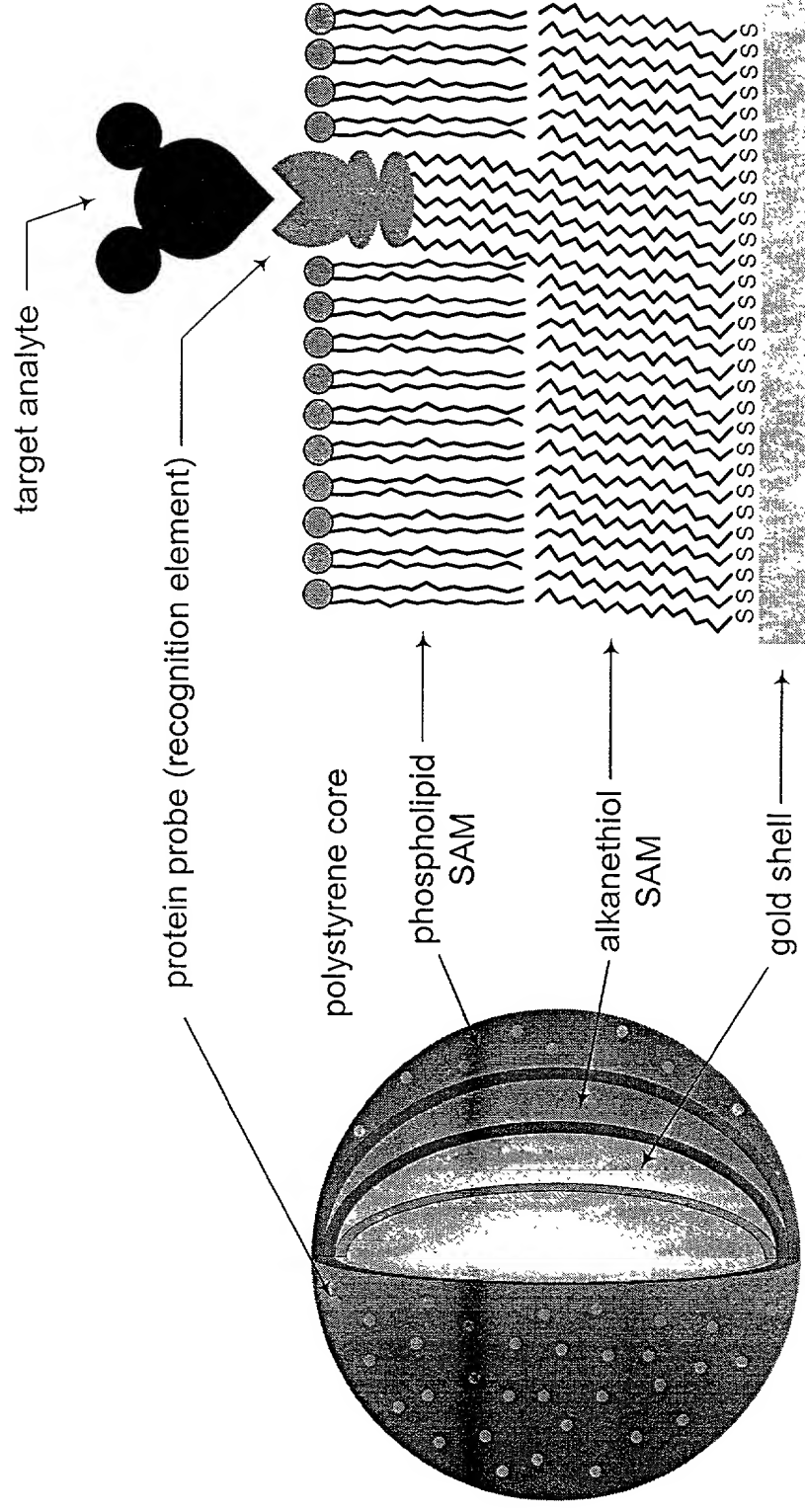


FIG. 2A

EDH750-27E800

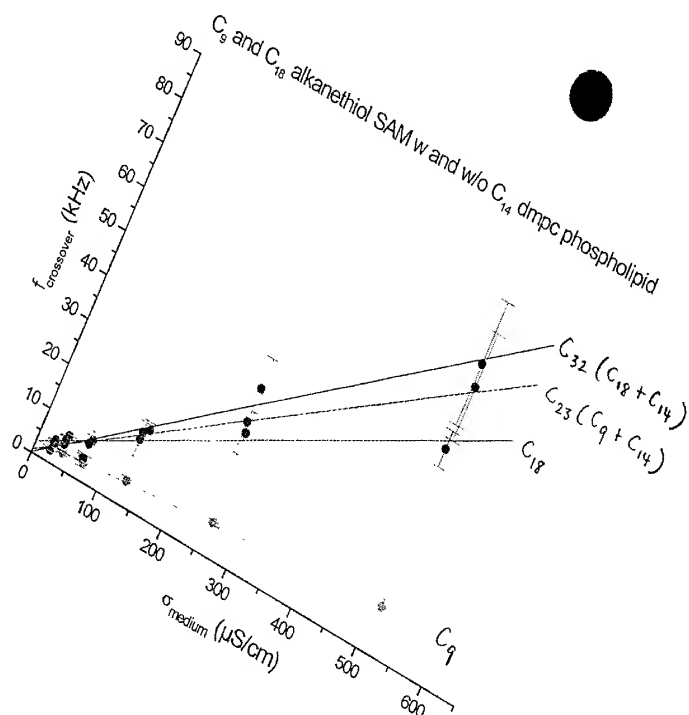


FIG. 22